

Quality of Waters in California"). Resolution 68-16 is deemed to incorporate the federal antidegradation policy where the federal policy applies under federal law. Resolution 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Central Coast Water Board's Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution 68-16.

5. **Anti-Backsliding Requirements.** Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) restrict backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.
6. **Endangered Species Act Requirements.** This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code, §§ 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state, including protecting rare and endangered species. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.
7. **Sewage Sludge and Biosolids.** This Order does not authorize any act that results in violation of requirements administered by USEPA to implement 40 CFR part 503, Standards for the Use or Disposal of Sewage Sludge. These standards regulate the final use or disposal of sewage sludge that is generated during the treatment of domestic sewage in a municipal wastewater treatment facility. The Discharger is responsible for meeting all applicable requirements of 40 CFR part 503 that are under USEPA's enforcement authority.

D. Impaired Water Bodies on the CWA section 303(d) List

CWA section 303(d) requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d) listed water bodies and pollutants, the Central Coast Water Board must develop and implement Total Maximum Daily Loads (TMDLs) that will specify Waste Load Allocations (WLAs) for point sources and Load Allocations (LAs) for non-point sources.

The USEPA approved the State's 2014/2016 303(d) list of impaired water bodies on April 6, 2018. The 2014/2016 303(d) list does not identify impairments within the vicinity of the discharge.

E. Other Plans, Policies and Regulations

1. **Discharges of Storm Water.** For the control of storm water discharged from the site of the wastewater treatment and disposal facilities, the Order requires, if applicable, the Discharger to seek authorization to discharge under and meet the requirements of the State Water Resources Control Board's Water Quality Order 2014-0057-DWQ, NPDES General Permit No. CAS000001, Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities Excluding Construction Activities.
2. **Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (State Water Board Order No. 2006-0003-DWQ).** The General Permit, adopted on May 2, 2006, is applicable to all "federal and state agencies, municipalities, counties,

districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California." The purpose of the General Permit is to promote the proper and efficient management, operation, and maintenance of sanitary sewer systems and to minimize the occurrences and impacts of sanitary sewer overflows. The Discharger is covered under the General Permit and must comply with its requirements.

IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations: 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR section 122.44(d) requires that permits include water quality-based effluent limitations to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

1. **Discharge Prohibition III.A.** (Discharge of treated wastewater at a location different from that described in this Order is prohibited). This prohibition is similar to the previous Order and is based on 40 CFR section 122.21(a), duty to apply, and CWC Section 13260, which requires filing a ROWD before discharges can occur.
2. **Discharge Prohibition III.B.** (Discharges of any waste in any manner other than as described by this Order are prohibited.) Because limitations and conditions of the Order have been prepared based on specific information provided by the Discharger and specific wastes described by the Discharger, the limitations and conditions of the Order do not adequately address waste streams not contemplated during drafting of the Order. To prevent the discharge of such waste streams that may be inadequately regulated, the Order prohibits the discharge of any waste that was not described by the Central Coast Water Board during the process of permit reissuance.
3. **Discharge Prohibition III.C.** (The average dry weather monthly rate of discharge to the Pacific Ocean shall not exceed 5.0 MGD.) This flow limitation is retained from the previous permit and reflects the design treatment capacity of the Facility. The prohibition ensures that the influent flow will not exceed the treatment plant's design capacity.
4. **Discharge Prohibition III.D.** (Wastes shall not be discharged to State Water Quality Protection Areas.) This prohibition restates a discharge prohibition established in Chapter III.H of the Ocean Plan.
5. **Discharge Prohibition III.E.** (The discharge of any radiological, chemical, or biological warfare agent or high-level radioactive waste to the Ocean is prohibited.) This prohibition restates a discharge prohibition established in Chapter III.H of the Ocean Plan.
6. **Discharge Prohibition III.F.** (The discharge of municipal or industrial waste sludge directly to the Ocean or into a waste stream that discharges to the Ocean is prohibited. The discharge of sludge or digester supernatant, without further treatment, directly to the Ocean or to a waste stream that discharges to the Ocean, is prohibited.) This prohibition restates a discharge prohibition established in Chapter III.H of the Ocean Plan.
7. **Discharge Prohibition III.G.** (The overflow or bypass of wastewater from the Discharger's collection, treatment, or disposal facilities and the subsequent discharge of

untreated or partially treated wastewater, except as provided for in Attachment D, Standard Provision I.G (Bypass), is prohibited.) The discharge of untreated or partially treated wastewater from the Discharger's collection, treatment, or disposal facilities represents an unauthorized bypass pursuant to 40 CFR section 122.41 (m) or an unauthorized discharge, which poses a threat to human health and/or aquatic life, and therefore, is explicitly prohibited by the Order.

8. **Discharge Prohibition III.H.** (Materials and substances that are prohibited). This prohibition is based on the requirements of the Ocean Plan. This prohibition was previously applied as an effluent limitation in Order R3-2009-0046 and is retained in this Order as a discharge prohibition.

B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at 40 CFR section 122.44 require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Secondary Treatment Standards at 40 CFR part 133.

Regulations promulgated in 40 CFR section 125.3(a)(1) require technology-based effluent limitations for municipal Dischargers to be placed in NPDES permits based on Secondary Treatment Standards or Equivalent to Secondary Treatment Standards.

The Federal Water Pollution Control Act Amendments of 1972 (PL 92-500) established the minimum performance requirements for POTWs [defined in section 304(d)(1)]. Section 301(b)(1)(B) of that Act requires that such treatment works must, at a minimum, meet effluent limitations based on secondary treatment as defined by the USEPA Administrator.

Based on this statutory requirement, USEPA developed secondary treatment regulations, which are specified in 40 CFR part 133. These technology-based regulations apply to all municipal wastewater treatment plants and identify the minimum level of effluent quality attainable by secondary treatment in terms of 5-day biochemical oxygen demand (BOD₅), total suspended solids (TSS), and pH.

Table F-8. Secondary Treatment Requirements

Parameter	Units	30-Day Average	7-Day Average
Biochemical Oxygen Demand 5-day @ 20°C (BOD ₅) ¹	mg/L	30	45
Carbonaceous Biochemical Oxygen Demand 5-day @ 20°C (CBOD ₅) ²	mg/L	25	40
Total Suspended Solids (TSS) ¹	mg/L	30	45
pH	standard units	6.0 – 9.0	

[1] The 30-day average percent removal for BOD₅ and TSS shall not be less than 85 percent.

[2] At the option of the permitting authority, effluent limitations for CBOD₅ may be substituted for those limitations specified for BOD₅.

Following publication of the secondary treatment regulations, legislative history indicates that Congress was concerned that USEPA had not “sanctioned” the use of certain biological treatment techniques that were effective in achieving significant reductions in BOD₅ and TSS for secondary treatment. Therefore, to prevent unnecessary construction of costly new facilities, Congress included language in the 1981 amendment to the Construction Grants statutes [Section 23 of Pub. L. 97-147] that required USEPA to provide allowance for alternative biological treatment technologies such as trickling filters or waste stabilization ponds. In response to this requirement, the definition of secondary treatment was modified on September 20, 1984 and June 3, 1985, and published in the revised secondary treatment regulations contained in 40 CFR section 133.105. These regulations allow alternative limitations for facilities using trickling filters and waste stabilization ponds that meet the requirements for “equivalent to secondary treatment.” These “equivalent to secondary treatment” limitations are up to 45 mg/L (monthly average) and up to 65 mg/L (weekly average) for BOD₅ and TSS.

Therefore, POTWs that use trickling filters, identified in 40 CFR section 133.103, as the principal process for secondary treatment and whose operation and maintenance data indicate that the BOD₅ and TSS values specified in the equivalent-to-secondary regulations cannot be achieved, can qualify to have their minimum levels of effluent quality for BOD₅ and TSS adjusted upwards.

In order to be eligible for equivalent-to-secondary limitations, a POTW must meet all of the following criteria:

- a. The principal treatment process must be either a trickling filter or waste stabilization pond.
- b. The effluent quality consistently achieved, despite proper operations and maintenance, is in excess of 30 mg/L BOD₅ and TSS.
- c. Water quality is not adversely affected by the discharge. (40 CFR § 133.101(g).)

The Facility's fixed film reactor is considered to be a trickling filter treatment unit. The Facility exceeds 30 mg/L BOD₅ in 49 percent of samples, and exceeds 30 mg/L TSS in 61 percent of samples based on monitoring data reported for November 2013 through September 2017. In addition, the Central Coast Water Board finds the receiving water outside of the authorized regulatory mixing zone has not been adversely affected by the discharge. Therefore, the Central Coast Water Board finds the Facility to be eligible for equivalent-to-secondary limitations.

2. Applicable Technology-Based Effluent Limitations

In the 1980s, the Central Coast Water Board adopted maximum alternate permit limits for BOD₅ and suspended solids of 45 mg/L (30-day average) and 65 mg/L (7-day average) as a temporary measure until plant performance data were available as a basis for setting limits. The minimum allowable removal efficiency of 75% was incorporated into the Discharger's permit at that time consistent with the California Ocean Plan. In 1994, the Discharger's permit was reissued with alternate BOD₅, and TSS limits of 45, and 40 mg/L, respectively, and suspended solids removal efficiency of 80%.

During design of the existing treatment facilities, USEPA indicated that trickling filters on the Central Coast of California should be capable of meeting BOD₅ and TSS limits of 35 mg/L (30-day average); however, the Central Coast Water Board determined that due

to the length, depth and design of the outfall structure, limits of 40 mg/L would be acceptable at that time. Based upon performance of other trickling filter facilities, Discharger performance, and USEPA expectations regarding trickling filters, limits of 40 mg/L for BOD₅ and TSS were included in the previous Order. These limits are retained in Order and are achievable by the Facility without impacts to water quality. The following table summarizes technology-based effluent limitations established in this Order.

Table F-9. Summary of Technology-Based Effluent Limitations

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
BOD ₅ ¹	mg/L	40	60	90
	lbs/day	1,668	2,502	3,753
TSS ¹	mg/L	40	60	90
	lbs/day	1,668	2,502	3,753
Settleable Solids	mL/L/hr	1.0	1.5	3.0
Turbidity	NTU	75	100	225
Oil and Grease	mg/L	25	40	75
	lbs/day	1,042	1,668	3,127
pH	standard units	6.0 – 9.0		

^[1] The 30-day average percent removal for BOD₅ and TSS shall not be less than 80 percent.

^[2] At the option of the permitting authority, effluent limitations for CBOD₅ may be substituted for those limitations specified for BOD₅.

All technology-based limitations are retained from the previous permit. Mass-based limitations for BOD₅, TSS, and oil and grease are based on a discharge rate of 5.0 MGD, the design treatment capacity of the Facility.

The treatment works as a whole provides significant biological treatment such that a minimum 65 percent reduction of BOD₅ is consistently attained (30-day average). In addition to the secondary treatment standards established in 40 CFR part 133, the State Water Board, in Table 2 of the Ocean Plan, has supplemented these technology-based requirements with additional requirements for conventional pollutants (settleable matter, oil and grease), which are applicable to the Facility. The Ocean Plan requirements are discussed in section IV.B.2 of this Fact Sheet.

C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

CWA Section 301(b) and 40 CFR section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) of 40 CFR requires that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy

interpreting the state's narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the Ocean Plan.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

Beneficial uses of ocean waters of the Central Coast Region are established by the Basin Plan and California Ocean Plan and are described in section III.C.1 and III.C.3, respectively, of the Fact Sheet. The water quality objectives (WQOs) from the California Ocean Plan are incorporated as receiving water limitations into this Order.

Water quality objectives applicable to ocean waters of the Central Coast region include water quality objectives for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, and radioactivity. In addition, Table 1 of the California Ocean Plan contains numeric water quality objectives for 83 toxic pollutants for the protection of marine aquatic life and human health. Pursuant to NPDES regulations at 40 CFR section 122.44(d)(1) and in accordance with procedures established by the California Ocean Plan, the Central Coast Water Board has performed a reasonable potential analysis (RPA) to determine the need for effluent limitations for the Table 1 toxic pollutants.

3. Determining the Need for WQBELs

Procedures for performing an RPA for ocean dischargers are described in Section III.C and Appendix VI of the California Ocean Plan. The procedure is a statistical method that projects an effluent data set while taking into account the averaging period of WQOs, the long-term variability of pollutants in the effluent, limitations associated with sparse data sets, and uncertainty associated with censored data sets. The procedure assumes a lognormal distribution of the effluent data set and compares the 95th percentile concentration at 95th percent confidence of each Table 1 pollutant, accounting for dilution, to the applicable water quality criterion. The RPA results in one of three following endpoints.

Endpoint 1 - There is "reasonable potential." An effluent limitation must be developed for the pollutant. Effluent monitoring for the pollutant, consistent with the monitoring frequency in California Ocean Plan Appendix III is required.

Endpoint 2 - There is no "reasonable potential." An effluent limitation is not required for the pollutant. California Ocean Plan Appendix III effluent monitoring is not required for the pollutant. However, the Central Coast Water Board may require occasional monitoring for the pollutant or for whole effluent toxicity as appropriate.

Endpoint 3 - The RPA is inconclusive. Monitoring for the pollutant or whole effluent toxicity testing, consistent with the monitoring frequency in California Ocean Plan Appendix III is required. An existing effluent limitation for the pollutant shall remain in the permit; otherwise, the permit shall include a reopener clause to allow for subsequent modification of the permit to include an effluent limitation if the monitoring establishes that the discharge causes, has the reasonable potential to cause, or contribute to an excursion above a Table B water quality objective.

The State Water Board has developed a reasonable potential calculator (RPcalc 2.2), which is available at:
http://www.swrcb.ca.gov/water_issues/programs/ocean/docs/trirev/stakeholder050505/rp_calc22_setup.zip

RPcalc 2.2 was used in the development of this Order and considers several pathways in the determination of reasonable potential.

a. First Path

If available information about the receiving water or the discharge supports a finding of reasonable potential without analysis of effluent data, the Central Coast Water Board may decide that WQBELs are necessary after a review of such information. Such information may include facility or discharge type; solids loading, lack of dilution; history of compliance problems; potential toxic effects; fish tissue data; CWA section 303(d) status of the receiving water; the presence of threatened or endangered species or their critical habitat; or other information.

b. Second Path

If any pollutant concentration, adjusted to account for dilution, is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

c. Third Path

If the effluent data contain three or more detected and quantified values (i.e., values that are at or above the minimum level (ML)) and all values in the data set are at or above the ML, a parametric RPA is conducted to project the range of possible effluent values. The 95th percentile concentration is determined at 95 percent confidence for each pollutant and compared to the most stringent applicable water quality objective to determine reasonable potential. A parametric analysis assumes that the range of possible effluent values is distributed log-normally. If the 95th percentile value is greater than the most stringent applicable water quality objective, there is reasonable potential for that pollutant.

d. Fourth Path

If the effluent data contains three or more detected and quantified values (i.e., values that are at or above the ML), but at least one value in the data set is less than the ML, a parametric RPA is conducted according to the following steps.

- i. If the number of censored values (those expressed as a "less than" value) account for less than 80 percent of the total number of effluent values, calculate the ML (the mean of the natural log of transformed data) and SL (the standard deviation of the natural log of transformed data) and conduct a parametric RPA, as described above for the Third Path.
- ii. If the number of censored values account for 80 percent or more of the total number of effluent values, conduct a non-parametric RPA, as described below for the Fifth Path. (A non-parametric analysis becomes necessary when the

e. Fifth Path

A non-parametric RPA is conducted when the effluent data set contains less than three detected and quantified values or when the effluent data set contains three or more detected and quantified values but the number of censored values accounts

for 80 percent or more of the total number of effluent values. A non-parametric analysis is conducted by ordering the data, comparing each result to the applicable water quality objective and accounting for ties. The sample number is reduced by one for each tie, when the dilution-adjusted method detection limit (MDL) is greater than the water quality objective. If the adjusted sample number, after accounting for ties, is greater than 15, the pollutant has no reasonable potential to exceed the water quality objective. If the sample number is 15 or less, the RPA is inconclusive, monitoring is required, and any existing effluent limitations in the expiring permit are retained.

An RPA was conducted using effluent data reported from monitoring events from September 2012 to September 2017. The effluent data were obtained from electronic self-monitoring data posted to the State Water Board's CWIQS database, discharge monitoring data posted to USEPA's Integrated Compliance Information System, and laboratory reports included in the report of waste discharge.

The following tables present results of the RPA, performed in accordance with procedures described by the California Ocean Plan, for parameters that were detected in effluent and which possessed effluent limitations in the existing Order. The maximum effluent concentration, number of samples considered in the analysis, the applicable WQO, and the RPA endpoint for each pollutant is identified. As shown in the following table, the RPA commonly led to Endpoint 3, meaning that the RPA is inconclusive, when a majority of the effluent data is reported as not detected (ND). In these circumstances, the Central Coast Water Board concludes that additional monitoring will be required for those pollutants during the term of the reissued permit and existing effluent limitations will be retained.

Table F-10. RPA Results for Discharges to the Pacific Ocean from Discharge Point 001

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples ¹	No. of Non-Detects ¹	Maximum Effluent Conc. (µg/L) ^{1, 2}	RPA Result, Comment ^{3, 4}
Objectives for Protection of Marine Aquatic Life					
Arsenic	8	3	1	2	Endpoint 3 – RPA is inconclusive.
Cadmium	1	3	2	0.2	Endpoint 3 – RPA is inconclusive.
Chromium (Hexavalent)	2	2	2	<10	Endpoint 3 – RPA is inconclusive.
Copper	3	3	0	36	Endpoint 2 – Effluent limitation not required.
Lead	2	3	0	1.3	Endpoint 2 – Effluent limitation not required.
Mercury	0.04	3	2	0.06	Endpoint 3 – RPA is inconclusive and Effluent limitation is not necessary.
Nickel	5	3	0	6	Endpoint 2 – Effluent limitation not required.
Selenium	15	3	3	<2	Endpoint 3 – RPA is inconclusive.
Silver	0.7	3	3	<1	Endpoint 3 – RPA is inconclusive.
Zinc	20	3	0	50	Endpoint 2 – Effluent limitation not required.
Cyanide	1	3	3	<4	Endpoint 3 – RPA is inconclusive.

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples ¹	No. of Non-Detects ¹	Maximum Effluent Conc. (µg/L) ^{1, 2}	RPA Result, Comment ^{3, 4}
Total Chlorine Residual	2	1,916	1,214	32,000	Endpoint 1 – Effluent limitation is necessary.
Ammonia (as N)	600	5	0	26,000	Endpoint 1 – Effluent limitation is necessary.
Acute Toxicity	0.3	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Chronic Toxicity	1	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Phenolic Compounds (non-chlorinated)	30	7	7	<1	Endpoint 3 – RPA is inconclusive.
Chlorinated Phenolics	1	4	4	<2	Endpoint 3 – RPA is inconclusive.
Endosulfan	0.009	3	3	<0.05	Endpoint 3 – RPA is inconclusive.
Endrin	0.002	4	4	<0.005	Endpoint 3 – RPA is inconclusive.
HCH	0.004	4	4	<0.005	Endpoint 3 – RPA is inconclusive.
Radioactivity	⁵	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Objectives for Protection of Human Health – Non-Carcinogens					
Acrolein	220	4	3	9	Endpoint 3 – RPA is inconclusive.
Antimony	1,200	3	2	1	Endpoint 3 – RPA is inconclusive.
Bis(2-chloroethoxy) Methane	4.4	4	4	<1	Endpoint 3 – RPA is inconclusive.
Bis(2-chloroisopropyl) ether	1,200	4	4	<1	Endpoint 3 – RPA is inconclusive.
Chlorobenzene	570	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Chromium (III)	190,000	3	2	1	Endpoint 3 – RPA is inconclusive.
Di-n-butyl Phthalate	3,500	4	4	<2	Endpoint 3 – RPA is inconclusive.
Dichlorobenzenes	5,100	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Diethyl Phthalate	33,000	4	4	<1	Endpoint 3 – RPA is inconclusive.
Dimethyl Phthalate	820,000	4	4	<1	Endpoint 3 – RPA is inconclusive.
4,6-dinitro-2-methylphenol	220	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
2,4-dinitrophenol	4	4	4	<5	Endpoint 3 – RPA is inconclusive.
Ethylbenzene	4,100	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Fluoranthene	15	4	4	<1	Endpoint 3 – RPA is inconclusive.
Hexachlorocyclopentadiene	58	4	4	<1	Endpoint 3 – RPA is inconclusive.
Nitrobenzene	4.9	4	4	<1	Endpoint 3 – RPA is inconclusive.
Thallium	2	3	3	<0.2	Endpoint 3 – RPA is inconclusive.

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples ¹	No. of Non-Detects ¹	Maximum Effluent Conc. (µg/L) ^{1, 2}	RPA Result, Comment ^{3, 4}
Toluene	85,000	4	2	2.3	Endpoint 3 – RPA is inconclusive.
Tributyltin	0.0014	4	3	0.0021	Endpoint 3 – RPA is inconclusive.
1,1,1-trichloroethane	540,000	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Objectives for Protection of Human Health - Carcinogens					
Acrylonitrile	0.1	4	4	<2	Endpoint 3 – RPA is inconclusive.
Aldrin	0.000022	7	7	<0.005	Endpoint 3 – RPA is inconclusive.
Benzene	5.9	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Benzidine	0.000069	4	4	<2	Endpoint 3 – RPA is inconclusive.
Beryllium	0.033	3	3	<0.2	Endpoint 3 – RPA is inconclusive.
Bis(2-chloroethyl) Ether	0.045	4	4	<1	Endpoint 3 – RPA is inconclusive.
Bis(2-ethylhexyl) Phthalate	3.5	4	3	12	Endpoint 3 – RPA is inconclusive.
Carbon Tetrachloride	0.9	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Chlordane	0.000023	3	3	<0.005	Endpoint 3 – RPA is inconclusive.
Chlorodibromomethane	8.6	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Chloroform	130	4	1	7	Endpoint 3 – RPA is inconclusive.
DDT	0.00017	4	4	<0.005	Endpoint 3 – RPA is inconclusive.
1,4-dichlorobenzene	18	8	8	<0.5	Endpoint 3 – RPA is inconclusive.
3,3'-dichlorobenzidine	0.0081	4	4	<2	Endpoint 3 – RPA is inconclusive.
1,2-dichloroethane	28	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
1,1-dichloroethylene	0.9	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Dichlorobromomethane	6.2	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Dichloromethane	450	4	4	<2	Endpoint 3 – RPA is inconclusive.
1,3-dichloropropene	8.9	NA	NA	NA	Endpoint 3 – RPA is inconclusive.
Dieldrin	0.00004	7	7	<0.005	Endpoint 3 – RPA is inconclusive.
2,4-dinitrotoluene	2.6	4	4	<1	Endpoint 3 – RPA is inconclusive.
1,2-diphenylhydrazine	0.16	4	4	<1	Endpoint 3 – RPA is inconclusive.
Halomethanes	130	4	3	0.7	Endpoint 3 – RPA is inconclusive.
Heptachlor	0.00005	7	7	<0.005	Endpoint 3 – RPA is inconclusive.

Table 1 Pollutant	Most Stringent WQO (µg/L)	No. of Samples ¹	No. of Non-Detects ¹	Maximum Effluent Conc. (µg/L) ^{1, 2}	RPA Result, Comment ^{3, 4}
Heptachlor Epoxide	0.00002	7	7	<0.005	Endpoint 3 – RPA is inconclusive.
Hexachlorobenzene	0.00021	4	4	<1	Endpoint 3 – RPA is inconclusive.
Hexachlorobutadiene	14	4	4	<1	Endpoint 3 – RPA is inconclusive.
Hexachloroethane	2.5	4	4	<1	Endpoint 3 – RPA is inconclusive.
Isophorone	730	4	4	<1	Endpoint 3 – RPA is inconclusive.
N-nitrosodimethylamine	7.3	4	4	<2	Endpoint 3 – RPA is inconclusive.
N-nitrosodi-N-propylamine	0.38	4	4	<1	Endpoint 3 – RPA is inconclusive.
N-nitrosodiphenylamine	2.5	4	4	<1	Endpoint 3 – RPA is inconclusive.
PAHs	0.0088	4	4	<1	Endpoint 3 – RPA is inconclusive.
PCBs	0.000019	3	3	<0.5	Endpoint 3 – RPA is inconclusive.
TCDD equivalents	3.9 x 10 ⁻⁹	3	0	1 x 10 ⁻⁶	Endpoint 1 – Effluent limitation is necessary.
1,1,2,2-tetrachloroethane	2.3	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
Tetrachloroethylene	2	1	1	<0.5	Endpoint 3 – RPA is inconclusive.
Toxaphene	0.00021	3	3	<0.5	Endpoint 3 – RPA is inconclusive.
Trichloroethylene	27	1	1	<0.5	Endpoint 3 – RPA is inconclusive.
1,1,2-trichloroethane	9.4	4	4	<0.5	Endpoint 3 – RPA is inconclusive.
2,4,6-trichlorophenol	0.29	4	4	<1	Endpoint 3 – RPA is inconclusive.
Vinyl Chloride	36	4	4	<0.5	Endpoint 3 – RPA is inconclusive.

[1] NA indicates that effluent data are not available.

[2] "<" indicates that the pollutant was not detected, and the reported value represents the method detection limit.

[3] Minimum probable initial dilution for this Discharger is 165:1.

[4] Effluent data used for this RPA were collected from September 2012 to September 2017.

[5] Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations

4. WQBEL Calculations

Table 1 of the Ocean Plan includes water quality objectives for the protection of marine aquatic life and these objectives are used to establish effluent limits for discharges from this Facility.

The Ocean Plan considers the "minimum probable initial dilution" in determining effluent limitations for toxic pollutants. Initial dilution is the process that results in the rapid and irreversible turbulent mixing of wastewater with ocean water around the point of discharge. For the purposes of the Ocean Plan, minimum initial dilution is the lowest average initial dilution within any single month of the year. Dilution estimates must be based on observed waste flow characteristics, observed receiving water density structure, and the assumption that no currents of sufficient strength to influence the initial

dilution process flow across the discharge structure. This Order retains a dilution credit of 165:1, established in the previous permit, for use in calculating WQBELs.

The following equation from Section III.C.4.a. of the Ocean Plan was used to calculate all concentration-based, effluent limitations.

$$C_e = C_o + D_m (C_o - C_s)$$

Where:

C_e = the effluent concentration limit, $\mu\text{g/L}$

C_o = the concentration (water quality objective) to be met at the completion of initial dilution, $\mu\text{g/L}$

C_s = background seawater concentration, $\mu\text{g/L}$

D_m = minimum probable initial dilution expressed as parts seawater per part wastewater.

Table 1 of the Ocean Plan establishes background concentrations for some pollutants to be used when determining reasonable potential (represented as " C_s "). In accordance with Table 1 implementing procedures, C_s equals zero for all pollutants not established in Table 3. The background concentrations provided in Table 3 are summarized below

Table F-11. Background Concentrations (C_s) – California Ocean Plan (Table 3)

Pollutant	Background Seawater Concentration
Arsenic	3 $\mu\text{g/L}$
Copper	2 $\mu\text{g/L}$
Mercury	0.0005 $\mu\text{g/L}$
Silver	0.16 $\mu\text{g/L}$
Zinc	8 $\mu\text{g/L}$

For all other California Ocean Plan Table 1 parameters, $C_s=0$

As an example, effluent limitations for copper are determined as follows:

Water quality objectives from the Ocean Plan for copper are:

Table F-12. Example Parameter Water Quality Objectives

Parameter	Units	6-Month Median	Daily Maximum	Instantaneous Maximum
Copper	$\mu\text{g/L}$	3	12	30

Using the equation, $C_e = C_o + D_m (C_o - C_s)$, effluent limitations are calculated as follows.

Copper

$$C_e = 3 + 165 (3 - 2) = 168 \text{ (6-Month Median)}$$

$$C_e = 12 + 165 (12 - 2) = 1,662 \text{ (Daily Maximum)}$$

$$C_e = 30 + 165 (30 - 2) = 4,650 \text{ (Instantaneous Maximum)}$$

Based on the implementing procedures described above, effluent limitations and performance goals have been calculated for all Table B pollutants from the California Ocean Plan and incorporated into this Order.

40 CFR 122.45(f)(1) requires effluent limitations be expressed in terms of mass, with some exceptions, and 40 CFR 122.45(f)(2) allows pollutants that are limited in terms of mass to additionally be limited in terms of other units of measurement. This Order includes effluent limitations expressed in terms of mass and concentration. In addition, pursuant to the exceptions to mass limitations provided in 40 CFR 122.45(f)(1), some effluent limitations are not expressed in terms of mass, such as pH and temperature, and when the applicable standards are expressed in terms of concentration (e.g., CTR criteria and MCLs) and mass limitations are not necessary to protect the beneficial uses of the receiving water. Mass-based effluent limitations were computed based on the maximum daily flow rate (5.0 MGD)

Mass-based effluent limitations were calculated using the following equation:

$$\text{lbs/day} = \text{permitted flow (MGD)} \times \text{pollutant concentration (mg/L)} \times 8.34$$

5. Indicator Bacteria

This Order includes effluent limitations for fecal coliform bacteria which are retained from Order No. R3-2009-0046. Fecal coliform effluent limitations are necessary in order to ensure discharges from the Facility are not causing or contributing to an exceedance of water quality objectives.

6. Whole Effluent Toxicity (WET)

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests - acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and may measure mortality, reproduction, and growth.

Central Coast Water Board staff has determined that treated wastewater from the Facility has a reasonable potential to cause or contribute to chronic toxicity in the discharge. Such a determination is consistent with the RPA procedure of the California Ocean Plan which requires consideration of all available information, including the "potential toxic impact of the discharge" to determine if WQBELs are necessary, notwithstanding the statistical procedure with which the RPA is conducted for most pollutants. Chronic toxicity limitations are retained from the previous permit.

The Discharger must also maintain a toxicity reduction evaluation workplan, which describes steps that the Discharger intends to follow in the event that acute and/or chronic toxicity limitations are exceeded. When monitoring measures WET in the effluent above the limitations established by the Order, the Discharger must resample, if the discharge is continuing, and retest. The Executive Officer will then determine whether to initiate enforcement action, require the Discharger to implement a toxicity reduction evaluation, or to implement other measures.

D. Final Effluent Limitation Considerations

1. Anti-Backsliding Requirements

Sections 402(o) and 303(d)(4) of the CWA and federal regulations at 40 CFR section 122.44(l) prohibit backsliding in NPDES permits for discharges to waters that are in attainment. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where

limitations may be relaxed. The effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order, with the exception of effluent limitations for which a definitive finding of no reasonable potential was made (i.e., Endpoint 2). Consistent with the California Ocean Plan, effluent limitations are not required for pollutants resulting in an Endpoint 2. The results of this RPA analysis has shown that copper, lead, nickel and zinc have Endpoint 2 and therefore their effluent limitations have been removed. Under CWA section 303(d)(4)(B), a limitation based on a TMDL, waste load allocation, other water quality standard, or any other permitting standard may only be relaxed where the action is consistent with the state anti-degradation policy. As described below, the removal of the effluent limitations for these constituents is consistent with the state anti-degradation policy and meets the backsliding exception under CWA section 402(o)(1)/303(d)(4)(B).

2. Antidegradation Policies

Provisions of this Order are consistent with applicable anti-degradation policy expressed by NPDES regulations at 40 CFR section 131.12 and by State Water Board Resolution No. 68-16. The Order does not authorize increases in discharge rates or pollutant loadings and its limitations and conditions otherwise ensure maintenance of the existing quality of receiving waters.

Removal of the final effluent limitations for copper, lead, nickel, and zinc is consistent with the State's antidegradation policy because the discharge remains in compliance with existing water quality objectives for the Pacific Ocean. The Order's limitations and conditions ensure maintenance of the existing quality of receiving waters. Therefore, provisions of the Order are consistent with applicable antidegradation policy expressed by NPDES regulations at 40 CFR section 131.12 and State Water Board Resolution 68-16.

3. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations consist of restrictions on BOD₅, TSS, oil and grease, turbidity, pH, and settleable solids. Restrictions on these pollutants are discussed in section IV.B of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. In addition, this Order contains effluent limitations more stringent than the minimum, federal technology-based requirements that are necessary to meet water quality standards. These limitations are not more stringent than required by the CWA.

4. Summary of Final Effluent Limitations – Discharge Point No. 001

Table F-13. Final Effluent Limitations

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
BOD ₅ ^[1]	mg/L	40	60	90
	lbs/day ^[2]	1,668	2,502	3,753
TSS ^[1]	mg/L	40	60	90
	lbs/day ^[2]	1,668	2,502	3,753
Settleable Solids	ml/L/hr	1.0	1.5	3.0
Turbidity	NTU	75	100	225
Oil and Grease	mg/L	25	40	75
	lbs/day ^[2]	1,042	1,668	3,127

Parameter	Units	Effluent Limitations		
		Average Monthly	Average Weekly	Maximum Daily
Fecal Coliform Bacteria	MPN/100 mL	--	200	2,000
pH	standard units	6.0 – 9.0 at all times		

[1] The average monthly percent removal for BOD₅ and TSS shall not be less than 80 percent.

[2] Mass based effluent limitations were calculated using the following formula:
lbs/day = pollutant concentration (mg/L) * Design flow (5.0 MGD) * conversion factor (8.34)

a. Percent Removal

The average monthly percent removal of BOD₅ and TSS shall not be less than 80 percent.

b. Initial Dilution

The minimum initial dilution of treated effluent at the point of discharge to the Pacific Ocean shall not be less than 165 to 1 (seawater to effluent) at any time.

Table F-14. Final Effluent Limitations, Protection of Marine Aquatic Life

Parameter	Units	Effluent Limitation		
		6-Mo Median ^[1]	Maximum Daily ^[2]	Instantaneous Maximum ^[3]
Arsenic	µg/L	0.83	4.82	12.79
	lbs/day	35	201	533
Cadmium	µg/L	0.17	0.66	1.66
	lbs/day	6.9	28	69
Chromium (Hex)	µg/L	0.33	1.33	3.32
	lbs/day	14	55	138
Mercury	µg/L	6.56	26.48	66.32
	lbs/day	0.27	1.1	2.8
Selenium	µg/L	2.49	9.96	24.90
	lbs/day	104	415	1,038
Silver	µg/L	0.090	0.44	1.14
	lbs/day	3.7	18	47
Cyanide ^[4]	µg/L	0.17	0.66	1.66
	lbs/day	6.9	28	69
Total Chlorine Residual	µg/L	0.33	1.33	9.96
	lbs/day	14	55	415
Ammonia (as N)	µg/L	99.6	398.4	996
	lbs/day	4,153	16,613	41,533
Acute Toxicity	TUa	--	5.25	--
Chronic Toxicity	TUc	--	166	--
Phenolic Compounds (non-chlorinated)	µg/L	4.98	19.92	49.80
	lbs/day	208	831	2,177
Phenolic Compounds (chlorinated)	µg/L	0.17	0.66	1.66
	lbs/day	6.9	28	69
Endosulfan	µg/L	1.49	2.99	4.48
	lbs/day	0.062	0.12	0.19
Endrin	µg/L	0.33	0.66	1.00

Parameter	Units	Effluent Limitation		
		6-Mo Median ^[1]	Maximum Daily ^[2]	Instantaneous Maximum ^[3]
	lbs/day	0.014	0.028	0.042
HCH	µg/L	0.66	1.33	1.99
	lbs/day	0.028	0.055	0.083
Radioactivity		^[5]		

^[1] The six-month median shall apply as a moving median of daily values for any 180-day period in which daily values represent flow weighted average concentrations within a 24-hour period. For intermittent discharges, the daily value shall be considered equal to zero for days on which no discharge occurred. The six-month median limit on daily mass emissions shall be determined using the six-month medial effluent concentration C_e and the observed flow rate, Q , in million gallons per day (MGD).

^[2] The daily maximum shall apply to flow weighted 24-hour composite samples. The daily maximum mass emission shall be determined using the daily maximum effluent concentration limit as C_e and the observed flow rate, Q , in MGD.

^[3] The instantaneous maximum shall apply to grab sample determinations.

^[4] If a Discharger can demonstrate to the satisfaction of the Central Coast Water Board (subject to USEPA approval) that an analytical method is available to reliably distinguish between strongly and weakly complexed cyanide, effluent limitations for cyanide may be met by the combined measurement of free cyanide, simple alkali metals cyanides, and weakly complexed organometallic cyanide complexes. In order for the analytical method to be acceptable, the recovery of free cyanide from metal complexes must be comparable to that achieved by the approved method in 40 CFR part 136.

^[5] Not to exceed limits specified in Title 17, Division 1, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30253 of the California Code of Regulations.

Table F-15. Final Effluent Limitations – Protection of Human Health – Non-Carcinogens

Parameter	Units	Effluent Limitation
		30-day Average
Acrolein	µg/L	36.52
	lbs/day	1,523
Antimony	µg/L	199.2
	lbs/day	8,307
Bis(2-chloroethoxy) methane	µg/L	0.730
	lbs/day	30
Bis(2-chloroisopropyl) ether	µg/L	199.2
	lbs/day	8,307
Chlorobenzene	µg/L	94.62
	lbs/day	3,946
Chromium (III)	µg/L	31.54
	lbs/day	1,315,218
Di-n-butyl phthalate	µg/L	581
	lbs/day	24,228
Dichlorobenzenes ^[1]	µg/L	846.6
	lbs/day	35,303
Diethyl phthalate	µg/L	5.478
	lbs/day	228,433
Dimethyl phthalate	µg/L	136.12
	lbs/day	5,676,204

Parameter	Units	Effluent Limitation
		30-day Average
4,6-dinitro-2-methylphenol	µg/L	36.52
	lbs/day	1,523
2,4-dinitrophenol	µg/L	0.664
	lbs/day	28
Ethylbenzene	µg/L	680.6
	lbs/day	28,381
Fluoranthene	µg/L	2.49
	lbs/day	104
Hexachlorocyclopentadiene	µg/L	9.628
	lbs/day	401
Nitrobenzene	µg/L	0.813
	lbs/day	34
Thallium	µg/L	0.332
	lbs/day	14
Toluene	µg/L	14.11
	lbs/day	588,387
Tributyltin	µg/L	232
	lbs/day	0.0097
1,1,1-trichloroethane	µg/L	89.64
	lbs/day	3,737,988

[2] Sum of 1,2- and 1,3-dichlorobenzene.

Table F-16. Final Effluent Limitations – Protection of Human Health – Carcinogens

Parameter	Units	Effluent Limitation
		30-day Average
Acrylonitrile	µg/L	16.6
	lbs/day	0.69
Aldrin	µg/L	3.652
	lbs/day	0.00015
Benzene	µg/L	979.4
	lbs/day	41
Benzidine	µg/L	11.454
	lbs/day	0.00048
Beryllium	µg/L	5.478
	lbs/day	0.23
Bis(2-chloroethyl) ether	µg/L	7.47
	lbs/day	0.31
Bis(2-ethylhexyl) phthalate	µg/L	581
	lbs/day	24
Carbon tetrachloride	µg/L	149.4
	lbs/day	6.2
Chlordane ^[1]	µg/L	3.818
	lbs/day	0.00016
Chlorodibromomethane	µg/L	1.428

Parameter	Units	Effluent Limitation
		30-day Average
DDT ^[2]	lbs/day	60
	µg/L	28.22
	lbs/day	0.0012
1,4-dichlorobenzene	µg/L	2.988
	lbs/day	125
3,3'-dichlorobenzidine	µg/L	1.345
	lbs/day	0.056
1,2-dichloroethane	µg/L	4.648
	lbs/day	194
1,1-dichloroethylene	µg/L	149.4
	lbs/day	6.2
Dichlorobromomethane	µg/L	1.029
	lbs/day	43
Dichloromethane	µg/L	74.7
	lbs/day	3115
1,3-dichloropropene	µg/L	1.477
	lbs/day	62
Dieldrin	µg/L	6.64
	lbs/day	0.00028
2,4-dinitrotoluene	µg/L	431.6
	lbs/day	18
1,2-diphenylhydrazine	µg/L	26.56
	lbs/day	1.1
Halomethanes ^[3]	µg/L	21.58
	lbs/day	900
Heptachlor	µg/L	8.3
	lbs/day	0.00035
Heptachlor epoxide	µg/L	3.32
	lbs/day	0.00014
Hexachlorobenzene	µg/L	34.86
	lbs/day	0.0015
Hexachlorobutadiene	µg/L	2.324
	lbs/day	97
Hexachloroethane	µg/L	415
	lbs/day	17
Isophorone	µg/L	121.18
	lbs/day	5053
N-nitrosodimethylamine	µg/L	1.212
	lbs/day	51
N-nitrosodi-n-propylamine	µg/L	63.08
	lbs/day	2.6
N-nitrosodiphenylamine	µg/L	415
	lbs/day	17

Parameter	Units	Effluent Limitation
		30-day Average
PAHs ^[4]	µg/L	1.461
	lbs/day	0.061
PCBs ^[5]	µg/L	3.154
	lbs/day	0.00013
TCDD equivalents ^[6]	µg/L	0.6474
	lbs/day	0.000000027
1,1,2,2-tetrachloroethane	µg/L	381.8
	lbs/day	16
Tetrachloroethylene	µg/L	332
	lbs/day	14
Toxaphene	µg/L	34.86
	lbs/day	0.0015
Trichloroethylene	µg/L	4.482
	lbs/day	187
1,1,2-trichloroethane	µg/L	1.56
	lbs/day	65
2,4,6-trichlorophenol	µg/L	48.14
	lbs/day	2.01
Vinyl chloride	µg/L	5.976
	lbs/day	249

[1] Sum of chlorodane-alpha, chlorodane-gamma, chlorodene-alpha, chlorodene-gamma, nonachlor-alpha, nonachlor gamma, and oxychlorodane.

[2] Sum of 4,4'-DDT, 2,4'-DDT, 4,4'-DDE, 2,4'-DDE, 4,4'-DDD, and 2,4'-DDD.

[3] Sum of bromoform, bromoethane (methylbromide), chloromethane (methyl chloride), chlorodibromomethane, and dichlorobromomethane.

[4] Sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,1,2-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[a,h]anthracene, fluorine, ideno[1,2,3-cd]pyrene, phenanthrene, and pyrene.

[5] Sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

[6] TCDD equivalents shall mean the sum of the concentrations of chlorinated dibenzodioxins (2,3,7,8-CDDs) and chlorinated dibenzofurans (2,3,7,8-CDFs) multiplied by their respective toxicity factors, as shown below:

Isomer Group	Toxicity Equivalent Factor	Isomer Group	Toxicity Equivalent Factor
2,3,7,8-tetra CDD	1.0	1,2,3,7,8-penta CDF	0.05
2,3,7,8-penta CDD	0.5	2,3,4,7,8-penta CDF	0.5
2,3,7,8-hexa CDDs	0.1	2,3,7,8-hexa CDFs	0.1
2,3,7,8-hepta CDD	0.01	2,3,7,8-hepta CDFs	0.01
octa CDD	0.001	octa CDF	0.001

E. Interim Effluent Limitations – Not Applicable

F. Land Discharge Specifications – Not Applicable

G. Recycling Specifications – Not Applicable

V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

The Ocean Plan contains numeric and narrative water quality objectives applicable to the coastal waters of California. Water quality objectives include an objective to maintain the high-quality waters pursuant to federal regulations (section 131.12) and State Water Board Resolution No. 68-16. Receiving water limitations in this Order are included to ensure protection of beneficial uses of the receiving water and are based on the water quality objectives contained in the Ocean Plan.

B. Groundwater – Not Applicable

VI. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D to the order.

Sections 122.41(a)(1) and (b) through (n) of 40 CFR establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with 40 CFR section 123.25, this Order omits federal conditions that address enforcement authority specified in 40 CFR sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Monitoring and Reporting Program (MRP) Requirements

The Discharger is required to provide technical or monitoring reports because it is the owner and operator responsible for the waste discharge and compliance with this Order. The Central Coast Water Board needs the information to determine the Discharger's compliance with this Order, assess the need for further investigation or enforcement action, and to protect public health and safety and the environment.

C. Special Provisions

1. Reopener Provisions

The Order may be modified in accordance with the requirements set forth at 40 CFR sections 122 and 124, to include appropriate conditions or limits based on newly available information, or to implement any, new state water quality objectives that are approved by USEPA. As effluent is further characterized through additional monitoring, and if a need for additional effluent limitations becomes apparent after additional effluent characterization, the Order will be reopened to incorporate such limitations.

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

The requirements in section VI.C.2.a through d of the Order address requirements necessary to ensure compliance with Ocean Plan objectives for toxicity. The requirement to maintain a toxicity reduction work plan is established in this Order. When toxicity monitoring measures chronic toxicity in the effluent above the limitation established by this Order, the Discharger is required to resample and

retest, if the discharge is continuing. When all monitoring results are available, the Executive Officer can determine whether to initiate enforcement action, whether to require the Discharger to implement toxicity reduction evaluation requirements or whether other measures are warranted. The toxicity reduction requirements in section VI.C.2.a-d are retained from the previous Order.

b. Water Contact Monitoring (Bacterial Characteristics)

The requirement for repeat water-contact bacteriological monitoring is established in this Order in accordance with California Ocean Plan section III.D.1.b for exceedance of a single sample maximum bacteria standard contained within section IV.A.1 of this Order.

3. Best Management Practices and Pollution Prevention

a. Pollutant Minimization Program

The Ocean Plan establishes guidelines for the Pollutant Minimization Program (PMP). At the time of the proposed adoption of this Order no known evidence was available that would require the Discharger to immediately develop and conduct a PMP. The Central Coast Water Board will notify the Discharger in writing if such a program becomes necessary. The Ocean Plan PMP language is included to provide guidance in the event that a PMP must be developed and implemented by the Discharger.

4. Construction, Operation, and Maintenance Specifications – Not Applicable

5. Special Provisions for Publicly Owned Treatment Works (POTWs)

a. Biosolids Management

Provisions regarding sludge handling and disposal ensure that such activity will comply with all applicable regulations. 40 CFR part 503 sets forth USEPA's final rule for the use and disposal of biosolids, or sewage sludge, and governs the final use or disposal of biosolids. The intent of this federal program is to ensure that sewage sludge is used or disposed of in a way that protects both human health and the environment.

USEPA's regulations require that producers of sewage sludge meet certain reporting, handling, and disposal requirements. As the USEPA has not delegated the authority to implement the sludge program to the State of California, the enforcement of sludge requirements that apply to the Discharger remains under USEPA's jurisdiction at this time. USEPA, not the Central Coast Water Board, will oversee compliance with 40 CFR part 503.

40 CFR section 503.4 (Relationship to other regulations) states that the disposal of sewage sludge in a municipal solid waste landfill unit, as defined in 40 CFR section 258.2, that complies with the requirements in 40 CFR part 258 constitutes compliance with section 405(d) of the CWA. Any person who prepares sewage sludge that is disposed in a municipal solid waste landfill unit must ensure that the sewage sludge meets the applicable requirements of 40 CFR part 503.

b. Collection System

The State Water Board issued General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order 2006-0003-DWQ (General Order) on May 2, 2006. The State Water Board amended the Monitoring and Reporting Program for the General Order through Order WQ 2013-0058-EXEC on

August 6, 2013. The General Order requires public agencies that own or operate sanitary sewer systems with sewer lines one mile of pipe or greater to enroll for coverage and comply with the General Order. The General Order requires agencies to develop sanitary sewer management plans and report all sanitary sewer overflows, among other requirements and prohibitions.

The General Order contains requirements for operation and maintenance of collection systems and for reporting and mitigating sanitary sewer overflows that are more extensive, and therefore, more stringent than the requirements under federal standard provisions. The Discharger and public agencies that are discharging wastewater into the facility's collection system were required to obtain enrollment for regulation under the General Order by December 1, 2006.

6. Climate Change Adaptation

The Central Coast Water Board is addressing the threat of climate change, sea-level rise, and flooding by including provisions in new orders that ensure mitigation and adaptation strategies are implemented. These provisions also include a requirement to evaluate wastewater recycling as part of a requirement to conduct a facility Life Expectancy Analysis. In the case of this Order, the Discharger is located in an area that is increasingly susceptible to sea-level rise and flooding hazards. Flooding may cause a discharge of wastewater similar to the discharge that occurred in 2010 when floodwaters entered an electrical conduit leading to pump motor control circuitry and caused the Discharger's influent pumps to fail. Failure of the influent pumps resulted in a 1,139,825-gallon sanitary sewer overflow that was discharged into waters of the United States including Meadow Creek, Oceano Lagoon, and the Pacific Ocean. To address the threat of flood and sea-level rise, this Order requires the submission of reports and planning documents consistent with the requirements of Coastal Development Permit No. 3-16-0233.

7. Compliance Schedules – Not Applicable

VII. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

CWA section 308 and 40 CFR sections 122.41(h), (j)-(l), 122.44(i), and 122.48 require that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Central Coast Water Board to establish monitoring, inspection, entry, reporting, and recordkeeping requirements. The Monitoring and Reporting Program (MRP), Attachment E of this Order establishes monitoring, reporting, and recordkeeping requirements that implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

In addition to influent flow monitoring, monitoring for BOD₅ and TSS is required to determine compliance with the Order's 80 percent removal requirement for these pollutants. Influent monitoring requirements have been retained from the previous Order.

B. Effluent Monitoring

Effluent monitoring is necessary to determine compliance with effluent limitations and evaluate compliance with applicable water quality objectives and criteria. Effluent monitoring requirements from Order R3-2009-0046 for Discharge Point No. 001 are retained in this Order.

C. Whole Effluent Toxicity Testing Requirements

Whole effluent toxicity (WET) limitations protect receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. Acute toxicity testing measures mortality in 100 percent effluent over a short test period and chronic toxicity testing is conducted over a longer period of time and may measure mortality, reproduction, and/or growth. This Order retains limitations and monitoring requirements for chronic toxicity for Discharge Point 001.

D. Receiving Water Monitoring

1. Surface Water

Receiving water monitoring is necessary to determine compliance with receiving water limitations and evaluate compliance with applicable water quality objectives and criteria. Receiving water monitoring requirements from Order R3-2009-0046 for Discharge Point 001 are retained in this Order.

Shoreline water monitoring and shellfish tissue bacterial monitoring specified in section VIII.A of the MRP have been conditionally waived unless operational changes, plant upsets or effluent violations occur, then the listed receiving water monitoring must resume.

Benthic sediment and biota monitoring requirements are retained from the previous permit. The benthic sediment monitoring is conducted jointly with the City of Pismo Beach Wastewater Treatment Facility. The Central Coast Water Board has imposed identical requirements in this Order and the City of Pismo Beach Order so that such monitoring can be coordinated between the two agencies, minimizing redundant effort and expense.

2. Groundwater – Not Applicable

E. Other Monitoring Requirements

1. **Biosolids/Sludge Monitoring.** Biosolids monitoring is required in this Order. The date of sampling is not specified so that the Discharger may coordinate with pretreatment monitoring requirements.
2. **Pretreatment Monitoring.** Pretreatment monitoring requirements are retained from the previous Order.
3. **Outfall Inspection.** The Order retains the requirement of the previous permit to conduct triennial visual inspections of the outfall and diffuser system and provide reports of those inspections to the Central Coast Water Board regarding the system's physical integrity.
4. **Brine Monitoring.** The MRP has retained separate monitoring requirements for the discharge of brine waste from the previous order. The Discharger requested that brine monitoring be conducted separately from secondary effluent monitoring, because the brine waste is mixed with the secondary effluent discharge after the final effluent monitoring location (EFF-001). The addition of the brine waste at a point before this final monitoring location interferes with numerous effluent testing results. The Central Coast Water Board is requiring the Discharger to develop an updated Brine Monitoring Plan to evaluate final effluent compliance after mixing with treated wastewater in light of these interferences. The requirements also retain logs that describe and quantify brine waste on an annual basis are established by the MRP to better characterize the composition of final combined effluent.

VIII. PUBLIC PARTICIPATION

The Central Coast Water Board considered the issuance of WDRs that will serve as an NPDES permit for the Facility. As a step in the WDR adoption process, the Central Coast Water Board staff developed tentative WDRs and encouraged public participation in the WDR adoption process.

A. Notification of Interested Persons

The Central Coast Water Board notified the Discharger and interested agencies and persons of its intent to prescribe WDRs for the discharge and provided an opportunity to submit written comments and recommendations. Notification was provided through publication in the local newspaper and posting to Discharger's and Central Coast Water Board's website.

The public had access to the agenda and any changes in dates and locations through the Central Coast Water Board's website at:

<http://www.waterboards.ca.gov/centralcoast/>

B. Written Comments

Interested persons were invited to submit written comments concerning tentative WDRs as provided through the notification process. Comments were due either in person, by email, or by mail to the Executive Office at the Central Coast Water Board at:

Central Coast Regional Water Quality Control Board
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401-7906

To be fully responded to by staff and considered by the Central Coast Water Board, the written comments were due to the Central Coast Water Board office by 5:00 p.m. on **November 30, 2018.**

The Central Coast Water Board received written comments from the Surfrider Foundation on November 26, 2018, and from the Culligan San Paso Company on November 29, 2018. Central Coast Water Board staff's responses to comments are provided below.

1. The Surfrider Foundation expressed concern regarding the discharge of textile microplastic in effluent and requested the following: "Please add a process for SSLCSD [South San Luis Obispo County Sanitation District] to sample and report microplastic discharge to their ocean outfall as a requirement of the Order. Based on the results of the accumulated data, a future Order might require SSLOCSD to upgrade to tertiary treatment."

Staff response: Staff acknowledges that microplastic pollution is an emerging concern that should be addressed. On September 20, 2018, SB 1263 was signed into law and tasks the Ocean Protection Council with developing a statewide microplastics strategy that will increase understanding of the scale and risks of microplastic materials in the marine environment and identify proposed solutions to address the impacts of microplastic materials. The statewide microplastics strategy will be submitted to the Legislature on or before December 31, 2021, along with recommended policy changes needed to implement the strategy. Findings and recommended policy changes proposed by the strategy should be incorporated into future orders to address microplastic pollution. Central Coast Water Board staff recommends that microplastic requirements be based on statewide efforts, rather than prematurely incorporated into various individual permits. In addition, at this time an analytical method for the detection and quantification of microplastic pollution has not been approved by U.S. EPA. Requiring

testing for microplastics will be more appropriate once an accepted method of sampling is developed.

2. The Surfrider Foundation is also concerned with the increasing quantity of brine waste being discharged through the SSLOCSD ocean outfall.

Staff response: The Discharger requires brine suppliers to sample their brine waste to determine the concentration of pollutants as limited by this Order. The Discharger specifies that the maximum allowable concentrations of these pollutants in brine waste is equal to final effluent limitations listed in section IV.D.4. This ensures that brine waste does not cause the Discharger to violate the conditions of this Order. Furthermore, the final effluent stream is diluted at a 1:165 ratio at the ocean outfall, and the brine is diluted in the effluent stream at approximately a 1:9 ratio. This means the brine waste is diluted at a 1:1,485 ratio by the time it is discharged through the ocean outfall. Given that the brine waste meets the same standards as treated effluent and that the brine is highly diluted upon discharge, brine waste does not pose a threat to water quality even if the quantity of brine waste being discharged increases.

3. The Surfrider Foundation requested that brine deliveries should be sampled by district employees rather than brine delivery truck drivers and that brine should be sequestered and mixed prior to discharge.

Staff response: Samples are taken from the brine delivery trucks under the supervision of district employees. This prevents tampering with samples. Samples are then analyzed by the Discharger's state-certified laboratory prior to discharge to ensure brine waste meets acceptance criteria. The current procedure is sufficient to ensure appropriate sampling and analysis.

4. The Surfrider Foundation is concerned about increased truck traffic from brine delivery trucks and said that traffic along an unpaved access road to the plant could negatively impact the Arroyo Grande Creek watershed.

Staff response: Staff acknowledges that while it is possible that increased truck traffic could negatively impact Arroyo Grande Creek, no evidence has been provided that the unpaved road poses a water quality threat. However, staff has added language to section VI.C.3.b of the order requiring implementation of best management practices if necessary to control sediment discharges from the road. If evidence of a water quality problem is presented to staff, the new requirement will provide staff with the means to work with the Discharger to address the problem.

5. The Culligan San Paso Company provided comments expressing support for the brine discharge program.

Staff response: Comment noted and entered into the record.

After the close of public comment, staff added section VI.C.6 to the order. This section includes requirements to analyze and report on potential impacts to the facility from sea-level rise and flooding. Staff also made minor changes to language addressing anti-backsliding and biosolids monitoring. In addition, staff added a requirement for implementation of best management practices if necessary to control sediment discharges from the unpaved road to the WWTP.

C. Public Hearing

The Central Coast Water Board held a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: January 31, 2019
Time: 9:00 am
Location: Central Coast Water Board Office
895 Aerovista Place, Suite 101, San Luis Obispo

Interested persons were invited to attend. At the public hearing, the Central Coast Water Board heard testimony pertinent to the discharge, WDRs, and permit. For accuracy of the record, important testimony was requested in writing.

D. Reconsideration of Waste Discharge Requirements

Any person aggrieved by this action of the Central Coast Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m. within 30 calendar days of the date of adoption of this Order at the following address, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

Or by email at waterqualitypetitions@waterboards.ca.gov

For instructions on how to file a petition for review, see:
http://www.waterboards.ca.gov/public_notices/petitions/water_quality/wqpetition_instr.shtml

E. Information and Copying

The Report of Waste Discharge, other supporting documents, and comments received are on file and may be inspected at the address above at any time between 8:00 a.m. and 5:00 p.m., Monday through Friday. Copying of documents may be arranged through the Central Coast Water Board by calling 805-549-3147.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Central Coast Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this order should be directed to Phil Hammer at (805) 549-3882 or phillip.hammer@waterboards.ca.gov.